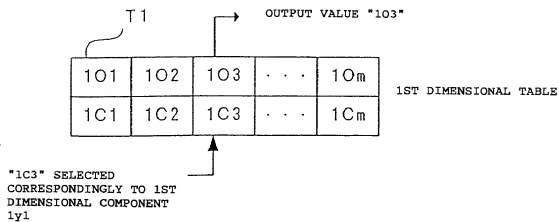
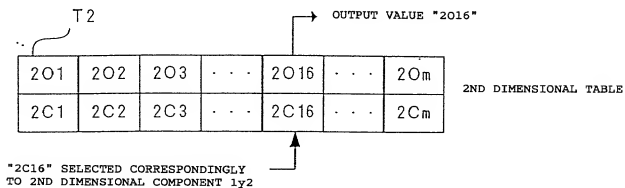


FIG. 1



(a)



(b)

FIG. 2

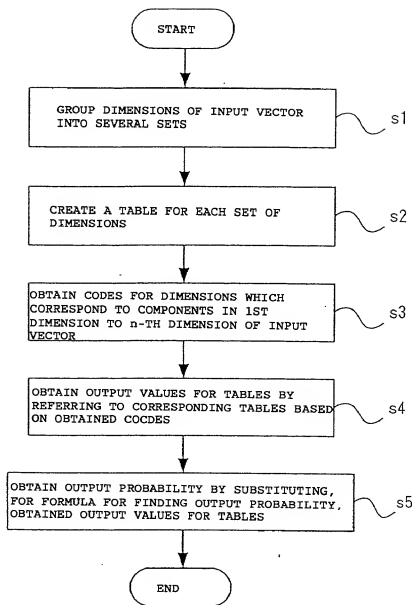


FIG. 3

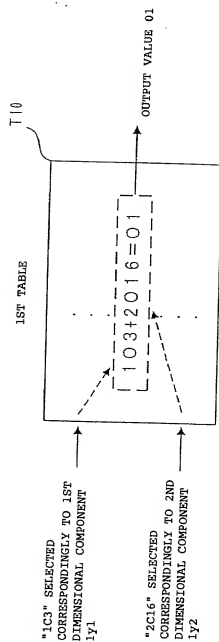


FIG. 4

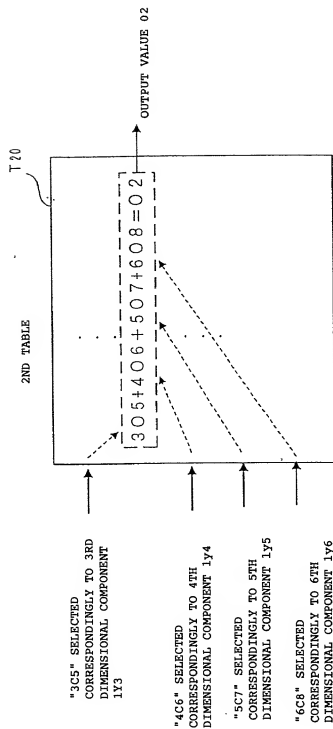


FIG. 5

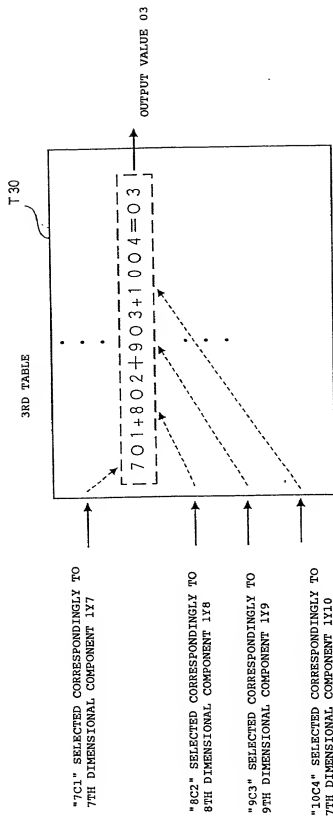


FIG. 6

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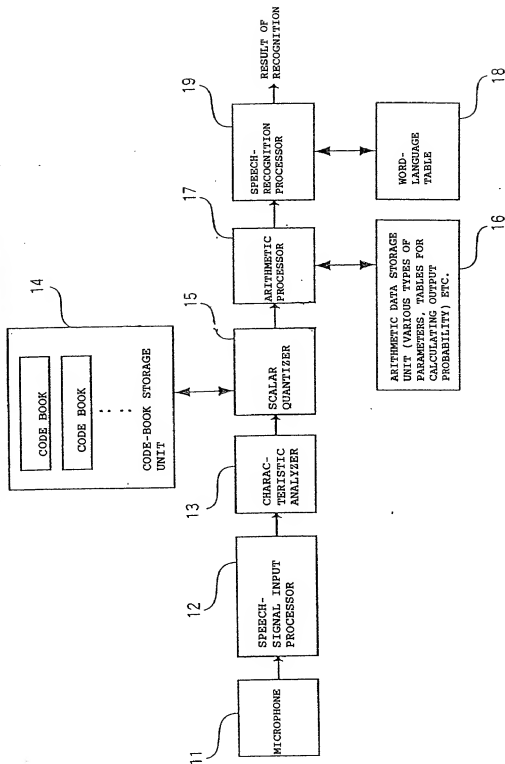


FIG. 7

EXPRESSION 1

$$b_{ij}(Y) = \prod_{k=1}^n \left(\frac{1}{2\pi\sigma_{ij}(k)^2} \right)^{\frac{1}{2}} \cdot e^{-\sum_{k=1}^n \left[\frac{\{y_k - \mu_{ij}(k)\}^2}{2\sigma_{ij}^2(k)} \right]} \quad (1)$$

EXPRESSION 2

$$\log_x b_{ij}(Y) = \underbrace{\left[\prod_{k=1}^n \left(\frac{1}{2\pi\sigma_{ij}^2(k)} \right)^{\frac{1}{2}} \right]}_A \cdot \underbrace{\left[-\sum_{k=1}^n \left[\frac{\{y_k - \mu_{ij}(k)\}^2}{2\sigma_{ij}^2(k)} \right] \cdot \log_x e \right]}_{B'} \quad (2)$$

B

EXPRESSION 3

$$\log_x b_{ij}(Y) = A - \underbrace{\sum_{k=1}^n \left[\frac{\{y_k - \mu_{ij}(k)\}^2}{2\sigma_{ij}^2(k)} \bullet Z \right]}_{B'} \quad (3)$$

EXPRESSION 4

$$\log b_{ij}(Y) = A - \sum_{k=1}^n \left[\frac{\{kC_c - \mu_{ij}(k)\}^p}{2\sigma_{ij}^2(k)} \bullet Z \right] \quad (4)$$

EXPRESSION 5

$$W_{ijm} \bullet b_m(Y) = W_{ijm} \bullet \prod_{k=1}^n \left(\frac{1}{2\pi\sigma_m^2(k)} \right)^{\frac{1}{2}} \bullet e^{-\sum_{k=1}^n \left[\frac{(y_k - \mu_m(k))^2}{2\sigma_m^2(k)} \right]} \tag{5}$$

EXPRESSION 6

$$\begin{aligned}
& \log_x W_{ijm} \bullet b_m \\
&= \log_x W_{ijm} + \log_x \underbrace{\left[\prod_{k=1}^n \left(\frac{1}{2\pi\sigma_m^2(k)} \right)^{\frac{1}{2}} \right]}_A \underbrace{\left[-\sum_{k=1}^n \left[\frac{\{y_k - \mu_m(k)\}^2}{2\sigma_m^2(k)} \right] \bullet \log_x e \right]}_{B'} \bullet \log_x e
\end{aligned} \tag{6}$$

EXPRESSION 7

$$\log_x W_{ijm} \bullet b_m = \log_x W_{ijm} + A - \sum_{k=1}^n \left[\frac{\{y_k - \mu_m(k)\}^2}{2\sigma_m^2(k)} \bullet Z \right] \quad (7)$$

$\underbrace{\hspace{15em}}_{B'}$
 $\underbrace{\hspace{15em}}_B$

EXPRESSION 8

$$\log_x W_{ijm} \bullet b_m = \log_x W_{ijm} + A - \underbrace{\sum_{k=1}^n \left[\frac{\{kC_c - \mu_m(k)\}^2}{2\sigma_m^2(k)} \bullet Z \right]}_{\text{D}} \underbrace{\quad}_{\text{E}} \quad (8)$$